

In the Claims:

1. (Currently Amended) A planar antenna assembly for use in two different frequency bands, the planar antenna assembly comprising:

_____ a printed circuit board (PCB) (12) having a ground plane (16) and rf circuitry ~~thereon~~, thereon;

_____ a patch antenna (10), ~~means for mounting the patch antenna such~~ that it is spaced from the ground plane, ~~the patch antenna not having any slot~~; and

_____ a feed (36) for coupling the patch antenna (10) to the rf circuitry, the feed comprising components for reactively tuning the patch antenna by tuning a ~~relatively lower~~ first frequency inductively and a second ~~relatively higher~~ frequency capacitively, the first frequency being lower than the second frequency.

2. (Currently Amended) An antenna assembly as claimed in claim 1, ~~characterised in that~~ wherein the components comprise a series connected, parallel L-C network (42).

3. (Currently Amended) A communications apparatus comprising:

_____ a housing; ~~(40) containing~~

_____ a printed circuit board (PCB) (12) within the housing, the printed circuit board having a ground plane (16) and rf circuitry ~~disposed thereon~~, thereon;

_____ a planar antenna (10) within the housing spaced from the ground plane, the planar antenna not having any slot;

_____ a dielectric (14) between the PCB and the planar ~~antenna~~, antenna; and

_____ a feed (36) coupling the planar antenna (10) to the rf circuitry, the feed comprising

components for reactively tuning the planar antenna by tuning a relatively-lower first frequency inductively and a relatively-higher second frequency capacitively, the first frequency being lower than the second frequency.

4. (Currently Amended) An apparatus as claimed in claim 3, ~~characterised in that~~ wherein the components are ~~carried by the planar antenna~~ located adjacent the dielectric.

5. (Currently Amended) An apparatus as claimed in claim 3, ~~characterised in that~~ wherein ~~the~~ components are mounted on the PCB.

6. (Currently Amended) An apparatus as claimed in claim 3, ~~characterised in that~~ wherein the planar antenna is a planar inverted-L antenna (PILA).

7. (Currently Amended) An apparatus as claimed in claim 3, ~~characterised in that~~ wherein the components comprise a series connected, parallel L-C network (42).

8. (Currently Amended) An apparatus as claimed in claim 3, ~~characterised in that~~ wherein the components comprise a transmission line (54).

9. (Currently Amended) [[A]] An rf module comprising:

_____ a printed circuit board (PCB) (12) having a ground plane (16) and rf circuitry ~~thereon,~~
thereon;

_____ a planar ~~pg.13~~ antenna (10) spaced from the ground plane, the planar antenna not having
any slot;

_____ a dielectric (14) in a space between the PCB and the planar antenna; ~~antenna;~~ antenna; and

_____ a feed (36) coupling the planar antenna (10) to the rf circuitry, the feed comprising components for reactively tuning the planar antenna by tuning a ~~relatively lower~~ first frequency inductively and a ~~relatively higher~~ second frequency capacitively, the first frequency being lower than the second frequency.

10. (Currently Amended) A module as claimed in claim 9, ~~characterised in that~~ wherein the components are ~~carried by the planar antenna~~ located adjacent the dielectric.

11. (Currently Amended) A module as claimed in claim 9, ~~characterised in that~~ wherein the components comprise a series connected, parallel L-C network (42).

12. (New) A planar antenna assembly as claimed in claim 1, wherein the components are attached to the patch antenna.

13. (New) An apparatus as claimed in claim 3, wherein the components are attached to the planar antenna.

14. (New) An apparatus as claimed in claim 3, wherein the dielectric is air.

15. (New) A module as claimed in claim 9, wherein the components are attached to the planar antenna.

16. (New) A module as claimed in claim 9, wherein the dielectric is air.

17. (New) A planar antenna assembly comprising:
a printed circuit board having a ground plane and rf circuitry thereon;

a planar antenna that it is spaced from the ground plane; and

a feed for coupling the planar antenna to the rf circuitry, the feed comprising components for reactively tuning the planar antenna by tuning a first frequency inductively and a second frequency capacitively, the first frequency being lower than the second frequency, the components being physically attached to the planar antenna.

18. (New) An antenna assembly as claimed in claim 17, wherein the components comprise a series connected, parallel L-C network.